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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,846	03/16/2004	Satoshi Yamada	118832	1512

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OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

FABER, DAVID

ART UNIT PAPER NUMBER

2178

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,846

Applicant(s)

YAMADA ET AL.

Examiner

David Faber

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/16/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the application filed 16 March 2004.

This office action is made Non-Final.

2. Claims 1-16 are pending. Claims 1, 3, 4, 5, 14, 15, and 16 are independent claims.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 16 March 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. The drawings were received on 16 March 2004 have been accepted by the Examiner.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claim 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 1, 3, 5 recites the limitation "the template device producing the/a layout template such that a layout distribution of each layout element in the layout frame is registered in connection with corresponding likelihood in the layout template." Examiner is unsure what exactly Applicant means by *each layout element in the layout frame is registered in connection with corresponding likelihood in the layout template*, and what the Applicant's means by *corresponding likelihood*. Therefore, Examiner will view the claim limitation as the layout element is laid out in the layout frame throughout this office action.

9. Claim 2 and 11 recites the limitation, "for the layout element assigned the weighting factor, the template production device weights the likelihood of the layout element in the plurality of layout samples by the weighting factor, and the template production device registers the layout distribution of the layout element in the layout frame in connection with the weighted likelihood." Examiner is unsure what exactly Applicant means by *the template production device weights the likelihood of the layout element in the plurality of layout samples by the weighting factor and the template production device registers the layout distribution of the layout element in the layout frame in connection with the weighted likelihood*. Therefore, Examiner will view the claim limitation as the layout element is laid out in the layout frame with a weighting factor throughout this office action.

10. Claim 4 recites the limitation, "producing a layout template in which the layout distribution of each layout element in the layout frame is registered in connection with corresponding likelihood in accordance with the structure of each layout element."

Examiner is unsure what exactly Applicant means by *each layout element in the layout frame is registered in connection with corresponding likelihood in accordance with the structure of each layout element* and what the Applicant's means by *corresponding likelihood*. Therefore, Examiner will view the claim limitation as the layout element is laid out in the layout frame throughout this office action.

11. Claim 6 recites the limitation, the layout device lays the at least one new layout element in accordance with the likelihood of each element-laying area for each layout element registered in the layout template." Examiner is unsure what exactly Applicant means by *at least one new layout element in accordance with the likelihood of each element-laying area for each layout element registered in the layout template.*"

Examiner does not what Applicant is referring to with the usage of likelihood and each element registered in the template. Therefore, Examiner will view the claim limitation as the new layout element is laid out in the layout template throughout this office action.

12. Claim 7 recites the limitations, "when the likelihood is equal for at least two element-laying areas of each layout element, the layout device creates the layout by laying each of the at least one new layout element in accordance with a priority assigned to the at least two element-laying areas." Examiner is unsure what Applicant means by *"the likelihood is equal for at least two element-laying areas of each layout*

element." Therefore, Examiner will view the claim limitation as the new layout element is laid out in the layout template throughout this office action.

13. Claim 8 recites the limitations "the mean values of vertical and horizontal lengths of each layout element that contains the cell and the likelihood of each element", "calculating the sum of likelihood of cells...", and selecting an extension start point that result in a greatest sum of likelihood." Examiner is unsure what Applicant means by each of the limitations stated above, and what *likelihood* means. Therefore, Examiner will be the claim limitation as "...of each layout element", "calculating the sum of all cells," and "...greatest sum" throughout this office action.

14. Claim 9 recites the limitation, "the layout device employs the area or the aspect ratio of each layout element instead of or in addition to the mean values, assigned to each cell, of vertical and horizontal lengths of each layout element." Examiner is unsure of the scope of the limitation since it can be viewed in a multiple views. The claim limitation can be viewed as the layout device [*employs the area*] or [*the aspect ratio of each layout element instead of or in addition to the mean values, assigned to each cell, of vertical and horizontal lengths of each layout element*]. Also, the claim can be viewed as "the layout device employs the [*area*] or the [*aspect ratio*] of each layout element [*instead of*] or [*in addition*] to the mean values, assigned to each cell, of vertical and horizontal lengths of each layout element. Throughout the office action, the Examiner views the claim limitation as the first view from above.

15. Claim 10 recites the limitation, "the layout elements are classified into image information whose main part is an image and text information whose main part is text;"

Examiner is unsure what the Applicant means by "*main part is an image, or main part is text.*" Therefore, Examiner views the claim as the layout elements are classified into image and text information throughout this office action.

16. Claim 10 recites the limitation, "when the template production device sets the layout distribution and the likelihood of a layout element of text information." Examiner is unsure what the Applicant means by "*likelihood of a layout element of text information*" Therefore, Examiner views the claim limitation as "when the template production sets the layout distribution of the text information" throughout this office action.

17. Claim 12 recites the limitation, "the template production device weights the likelihood of each layout element in each layout sample by the weighting factor assigned to each layout sample in which the layout element is included, and the template production device registers, in the layout template, the element-laying area of the layout element in the layout frame in connection with the weighted likelihood." Examiner is unsure what Applicant means by *the template production device weights the likelihood of each layout element in each layout sample by the weighting factor assigned to each layout sample in which the layout element is included*, what the likelihood means, and *the template production device registers, in the layout template, the element-laying area of the layout element in the layout frame in connection with the weighted likelihood.*" Therefore, Examiner will view the claim limitation as the layout element is laid out in the layout frame with a weighting factor throughout this office action.

18. Claim 13 recites the limitation “for an element-laying area in which at least two layout elements overlap, the template production device calculates the sums of likelihood of those at least two layout elements over the plurality of layout samples and registers, in the layout template, the calculated sums of likelihood in connection with the element-laying area. Examiner is unsure what the Applicant means by of the limitation especially, *calculate the sums of likelihood and registers the calculated sums of likelihood in connection with the element-laying area*. Therefore, throughout this Office action, Examiner views Claim 13 as when two layout elements overlap, a distance is calculated in order to move one of the objects to stop the overlapping the elements throughout this office action.

19. Claims 14 and 15 recite the limitation “producing a layout template such that a layout distribution of each layout element in the layout frame is registered in connection with corresponding likelihood.” Examiner is unsure what exactly Applicant means by *each layout element in the layout frame is registered in connection with corresponding likelihood*, and what the Applicant’s means by *corresponding likelihood*. Therefore, Examiner will view the claim limitation as the layout element is laid out in the layout frame throughout this office action.

20. Claim 16 recites the limitation, “an element-laying area of the layout element in the layout frame is registered in connection with likelihood of the layout element in the plurality of layout samples.” Examiner is unsure what Applicant means by *registered in connection with likelihood of the layout element* and what *likelihood* means. Therefore,

Examiner will view the claim limitation as the layout element is laid out in the layout frame throughout this office action.

21. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 101

23. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

24. Claim 1-3, 5-14, and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For your reference, below is a section from MPEP 2105 :

...

(a) Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listings Per Se
Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive

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material per se from claims that define statutory inventions.

Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim.

25. Claims 1-2, and 5-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims appear to be claiming "software systems" i.e. systems without hardware indication, which is computer program per se. Since the computer program is not embodied on a tangible computer readable medium, they appear non-statutory.

26. Claims 3, and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are claiming a computer program per se. A computer program not embodied on a tangible computer readable medium is not statutory.

27. Claim 16 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim is claiming a data structure for creating a layout. Since the data structure is not claimed as embodied in computer-readable media it appears non-statutory,

Claim Rejections - 35 USC § 102

28. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

29. Claims 1, 3-6, 10, and 14-16 rejected under 35 U.S.C. 102(b) as being anticipated by Microsoft Word 2000, hereinafter "Microsoft Word", (Microsoft, "Microsoft Word 2000", 1999)

Examiner provides the printout of Microsoft Word's "About Microsoft Word" Microsoft 2000 word processing software as evidence disclosing the software copyright date is 1999.

As per independent Claim 1, Microsoft Word contains a process wherein a user is able to create a template from previous simple layout templates such as letters. The user is able to create a user-defined template by using the mouse by clicking on File menu, then clicking on New (Screen 1) A dialog box appears with a selection tabs. Clicking on the Letters & Faxes tab brings up a list of layout 'samples' and wizards before the tabs used to create templates. The user wishing to create a letter template, clicks on the Professional Letter option. Then the user clicks the bubble next the Template option under Create New in the right hand corner. (Screen 2) Then the user clicks on the 'OK', button and a professional letter 'layout sample' is shown to the screen with multiple layout text frames consisting of text elements within each frame. (Screen 3). Additionally, since the layout elements were presented when the layout

sample was displayed to the screen, and incorporated within the layout, it is laid within the layout template.

As per independent Claim 3, Claim 3 recites a program for performing the system of Claim 1, and is similarly rejected under rationale.

As per independent Claim 4, Claim 4 recites similar limitations as in Claim 1 and is similarly rejected under rationale. Microsoft Word discloses a method comprising:

- Selecting at least one type of layout sample (Screen 2: e.g. when deciding to make a letter template, the user can choose between a Contemporary, Elegant or Professional letter style), each of the at least one type of layout sample including at least one layout element laid in a layout frame; (Screen 3: contains a text frame with a text element)
- Determining the structure of each selected layout sample for each layout element (Screen 2, for when deciding to make a company letter template, the user can choose from three different letter structures: Contemporary, Elegant or Professional layouts. Each layout disclose a different layout presentation shown in Screens 3-5)

As per independent Claim 5, Claim 5 recites a system for performing the method of Claim 4 and is similarly rejected under rationale. Furthermore, Microsoft Word discloses a method comprising:

A layout device to lay out at least one new layout element in the layout frame in accordance with the layout template produced by the template production device.
(Screen 2 & 3: when the user selects which layout to use and hits the 'OK' button to

create the template, new standard text elements are placed into created text frames within the layout. Once created, the user has the ability to edit the template to his or her liking such as changing the "Company Name Here" to the actual company's name.)

As per dependent Claim 6, Microsoft Word lays the text elements into text frames when the layout template is created (Screen 2, and 3)

As per dependent Claim 10, Microsoft Word discloses a system:

- The layout elements are classified into image information whose main part is an image and text information whose main part is text (Microsoft Word inherently knows the difference between a text element and an image element located within the layout)
- The template production also sets information indicating font type and a font size of the text information and the layout device determines the font type and the font size of the layout element in accordance with the information indicating the font type and the font size assigned to the element-laying area. (Screen 2 and Screen 3: When the template is created based on the layout sample picked, each frame contains added text that discloses different font type and sizes. A user can click on the text frame to be disclose of its current font type and size shown in a toolbar located above, also shown in Screen 3.

As per independent Claim 14, Claim 14 recites a program for performing the system of Claim 5 and is similarly rejected under rationale.

As per independent Claim 15, Claim 15 recites similar limitations as in Claims 4 and 5 combined, and is similarly rejected under rationale.

As per independent Claim 16, Microsoft Word discloses:

- The layout template is produced by using a plurality of layout samples each including at least layout elements laid in a predetermined layout frame, such that, for each layout element, an element laying area of the layout element in the layout frame is registered in connection with likelihood of the layout element in the plurality of layout samples. (Screen 2 and Screen 3: User is able to choose from a plurality of layout sample to create a layout template which layout text elements in multiple text frames)

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. Claims 2, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Word 2000, hereinafter "Microsoft Word", (Microsoft, "Microsoft Word 2000", 1999) in further view of Simske (US PGPub 2004/0133560, filed 1/7/2003)

As per dependent Claims 2, 11, and 12, Microsoft Word fails to specifically disclose at least one of the plurality of elements assign a weighting factor, and a weighting factor assigned to each layout sample as whole. However, Simske disclosing using position and font information based on document layout, elements may be

assigned a layout role weight. (Paragraph 0020-0022) In addition, Simske discloses a weight based on document. (Paragraph 0022, 0035)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Microsoft Word's software with Simske's method layout weight to provide the user the benefit of accurate document organization.

32. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Word 2000, hereinafter "Microsoft Word", (Microsoft, "Microsoft Word 2000", 1999) in further view of Sieber (US Patent 5,649,216, patented 7/15/1997)

As per dependent Claim 7, Microsoft Word fails to specifically disclose the layout device creates the layout by laying each of the at least one new layout element in accordance with a priority assigned to the at least two element-laying areas. However, Sieber discloses the arranging of elements with constraints into a hierarchical arrangement in which some constraints have a higher priority than others and the higher priority are satisfied. (Column 7, lines 30-43; Claim 31) In other words, the elements with constraints with higher priority are laid or arranged first before others with lower priority.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Microsoft Word's software with Sieber's method since it would have provided the user the benefit of simplifying the design of documents which contain elements that is capable of capturing the complex relationship between these elements.

33. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft Word 2000, hereinafter "Microsoft Word", (Microsoft, "Microsoft Word 2000", 1999) in further view of Simmons (US PGPub 20040003350, filed 6/28/2002)

As per dependent Claim 13, Microsoft Word fails to specifically disclose when two layout elements overlap, a distance is calculated in order to move one of the objects to stop the overlapping the elements. However, Simmons et al discloses when two elements laid out overlap each other or a collision occurs, the shortest distance is determined required to move the object to resolve the collision, and the object is moved in the direction of the shortest distance. (Paragraph 0009, 0039-0041, FIG 7, 8, 10).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Microsoft Word's method with Simmons et al's since Simmons et al's method of solving the overlapping since it provided the method of resolving object collisions, or overlapping, resulting from document editing.

Allowable Subject Matter

34. Claims 8-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Courter et al, "Mastering Microsoft Office 2000 Professional Edition: Discloses Creating Templates within Word 2000.
- Courter et al, "Mastering Word 97 (Fourth Edition): Discloses Creating Templates within Word 97.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Faber
AU 2178
Patent Examiner



STEPHEN HONG
SENIOR PATENT EXAMINER